

MOTION ESTIMATION PROCESS AND SYSTEM

ABSTRACT OF THE DISCLOSURE

A motion estimation process in video signals organized in successive frames divided into macroblocks that is carried out by the identification of motion vectors. In a first identification phase, starting from a current motion vector, a best motion vector predictor is identified, chosen from a set of candidates. The best predictor thus identified is then subjected to a second refining phase. The aforesaid set of candidates is identified by selecting vectors belonging to macroblocks close to the current vector within the current frame and the preceding frame. Preferably, the refining phase comprises the definition of a grid of n points centered on the central position to which the best motion vector points and the distance of the points of the grid from the center is defined as a function of the matching error typically consisting of an SAD function, defined in the first identification phase. Application to the IPB and APM operating modes of the H.263+ video standard is envisaged.

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